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1. A semiconductor device, comprising:
 - a semiconductor substrate;
 - a gate insulation film formed on one major surface of said semiconductor substrate and containing titanium oxide as a (primary) constituent material; and
 - a gate electrode film formed in contact with said gate insulation film and containing ruthenium oxide or alternatively iridium oxide as a (primary) constituent material.
2. A semiconductor device according to claim 1, wherein film thickness of said gate insulation film and said gate electrode film is greater than 0.9 nm (inclusive). *WMS, rec 7,*
3. A semiconductor device according to claim 1, wherein said titanium oxide is in the form of a crystal of rutile structure.
4. A semiconductor device, comprising:
 - a semiconductor substrate;
 - a gate insulation film formed on one major surface of said semiconductor substrate and containing titanium oxide as a primary constituent material; and
 - a gate electrode film formed in contact with said gate insulation film,wherein said gate electrode film is constituted by a laminated film which is composed of an electrically conductive oxide film containing ruthenium oxide or alternatively iridium oxide as a (primary

constituent material and an electrically conductive film containing a metal as a (primary) constituent material.

5. A semiconductor device according to claim 4, wherein film thickness of said gate insulation film and said electrically conductive oxide film is greater than 0.9 nm inclusive.

6. A semiconductor device according to claim 4, wherein said titanium oxide is in the form of a crystal of rutile structure.

7. A semiconductor device according to claim 5, wherein said metal is ruthenium or alternatively iridium.

8. A semiconductor device, comprising:
a semiconductor substrate;
a gate insulation film formed on one major surface of said semiconductor substrate and containing titanium oxide as a primary constituent material;
a gate electrode film formed in contact with said gate insulation film and constituted by a laminated film which is composed of an electrically conductive oxide film containing ruthenium oxide or alternatively iridium oxide as a primary constituent material and an electrically conductive film containing a metal as a primary constituent material;
a first capacitor electrode formed on the one major surface of said semiconductor substrate;
a capacitor insulation film formed in contact

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with said first capacitor electrode and exhibiting a high dielectric constant or alternatively ferroelectricity; and

a second capacitor electrode formed in contact with said capacitor insulation film.

9. A semiconductor device according to claim 8, wherein film thickness of said insulation film and said electrically conductive oxide film is greater than 0.9 nm (inclusive).

10. A semiconductor device according to claim 8, wherein said titanium oxide is in the form of a crystal of rutile structure.

11. A semiconductor device according to claim 8, wherein said metal is ruthenium or alternatively iridium.

12. A semiconductor device, comprising:
a semiconductor substrate;
a gate insulation film composed of a first gate insulation film formed on one major surface of said semiconductor substrate and containing titanium oxide and titanium silicate as primary constituent materials and a second gate insulation film formed on said one major surface and containing titanium oxide as a (primary) constituent material; and
a gate electrode film formed in contact with said gate insulation film and containing ruthenium oxide or alternatively iridium oxide as a (primary) constituent material.

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13. A semiconductor device, comprising:
a semiconductor substrate;
a gate insulation film composed of a first gate insulation film formed on one major surface of said semiconductor substrate and containing titanium oxide and titanium silicate as primary constituent materials and a second gate insulation film formed on said one major surface and containing titanium oxide as a primary constituent material; and
a gate electrode composed of a first gate electrode film formed in contact with said gate insulation film and containing ruthenium oxide or alternatively iridium oxide as a primary constituent material and a second gate electrode film formed in contact with said gate insulation film and containing one selected from a group consisting of ruthenium, iridium, platinum, tungsten and molybdenum as a primary constituent material.
14. A method of manufacturing a semiconductor device, comprising the steps of:
forming a gate insulation film containing titanium oxide as a primary constituent material on one major surface of a semiconductor substrate; and
depositing on said gate insulation film a conductor film containing ruthenium or alternatively iridium as a primary constituent material to thereby form a gate electrode film.
15. A method of manufacturing a semiconductor

device, comprising the steps of:

forming a gate insulation film containing titanium oxide as a primary constituent material on one major surface of a semiconductor substrate;

depositing on said gate insulation film a conductor film containing ruthenium or alternatively iridium as a primary constituent material to thereby form a gate electrode film;

forming a first capacitor electrode;

forming a capacitor insulation film having high dielectric constant or ferroelectricity in contact with said silicon first capacitor electrode; and

forming a second capacitor electrode in contact with said capacitor insulation film.

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